July 10, 2018 | CALT Meeting

CALT Participants: Chris Rose, Lisa Busch, Linda Behnken, Larry Hinzman, Janet Reiser, Nicole Kanayurak, Luke Hopkins, Meera Kohler, Isaac Vanderburg, Denise Michels, Teresa Imm (substitute for John Hopson), Nils Andreassen,

State: Larry Hartig, Alice Edwards, Denise Koch, Nikoosh Carlo, Danielle Meeker, David Rogers, Katie Conway

Public: Elizabeth Jenkins (AK Energy Desk), Brandon (AOGA), Karl Ohls (North Star Group), Scott Gruhn (Climate Action Network), Dorothy Childers (Alaska Ocean Acidification Network), Kristin Timm (UAF), Mindy O'Neall, Andrew McDonnell (UAF), Randall Buckendorf (BP),

Nils: Everyone has new version of action plan. Received input from majority of members. Received oil and gas report yesterday. A lot left to add, but we're making progress. Going to walk through policy statement and get feedback. PS#1 is very much about communities -infrastructure, networks, capacity. Tried to start out with why things are important, and then incorporate various comments. Compilation of lots of different contributions. In 1.1A, we talk about developing a network of local governments to facilitate stronger communication and collaboration at local level.

Randall: It would be really helpful if you have a red line or comparative version.

Nils: We don't yet have a final version that's been edited, so we don't have this.

Luke Hopkins: The bold in almost every place is the action item and there are a couple that aren't bolded. Is there a reason that some of them aren't bolded?

Nils: We have more formatting to take care of. Moving on, 1.1B focuses on cooperative agreements. Cooperative agreements is a term of art, so we might want to review what we want to say. Opportunity to review how we work with communities and how they develop risk and resilience plans. 1.1C builds on that threat. Some comments madereference to coastal zone management regulations.

Andrew McDonnell: Is this document available?

Nils: Not yet – still deliberative. We should have a public version available in the near future. One way to think about this language is that it provides a suite of options for the Governor. It's not committing the State to anything, but outlines some of the considerations involved. 1.2 follows on itself. First is about how we work with communities, 1.2 looks at what communities need.

Nils: 1.2C looks at community and regional risk and resilience plans. There's a process in place for doing community risk planning at DCRA. That could be strengthened. Our hope would be to expand the State's capacity to support community risk planning. At the same time, the State needs to think about this on a

statewide level. 1.2D and 1.2E might not belong here – there might be a more appropriate place. 1.2D focused on data collection at local gov't level.

Larry Hinzman: I'll hammer out a paragraph for 1.2E. We'll write something about the University being receptive to the State's needs for data on natural resources.

Denise Michels: On 1.2D, that's also needed to apply for transportation grants. We don't have the baseline data to do cost-benefit analysis, so that would be a really good one.

Nils: Thanks. [...] Need to split out what the federal government's responsible for, what the state's responsible for. There's a lot of work going already related to coordination for relocation. Someone had mentioned village planning groups and I'm not quite sure what they are, but I included them here.

For 1.3B, collaborate with federal agencies on a federal implementation plan. It's imagined that the federal government would take the lead on that. Request to Congressional delegation to amend the Stafford Act.

Larry Hartig: We've been discussing this with DMVA. We're skeptical that the Stafford Act is the best vehicle to get federal funding for these disasters. I won't get into all the reasons. We're still looking at that and looking for other activities to explore. We just don't think that Stafford Act fits well – would allows other States.

Michels: Would this be continued funding for Denali Commission to continue to be the lead agency.

Nils: They had funding this year that they applied to Metarvik through ANTHC. I don't know if there's any certainty about their role moving forward.

Michels: Maybe that's a discussion someone should have.

Meera Kohler: Statutory language was changed to make Denali Commission the lead on climate change in Alaska. It's a hit-or-miss thing.

Nils: Is it appropriate to say "Western science and indigenous knowledge"? Larry, do you have a position.

Hinzman: Indigenous knowledge does incorporate science, so it makes sense to me as-is.

Nicole Kanayurak: That sounds good to me, but I'll get back to you.

Nils: We talk through the data and Indigenous Knowledge that's currently being used and see what more we can do with it, and how we can connect it to state, local, and regional-led efforts.

Chris Rose: I'm wondering whether the US Climate Resilience Toolkit being led by NOAA is an opportunity for us to get funding. Our experience will have information that other states will find useful in the future.

Nikoosh: US Climate Alliance has created a platform and is offering it to other states.

Nils: Goes back to the Lt. Governor's idea of sharing our story. 1.3D is about creating opportunities for training.

1.4C builds on this; mentions the Governor's Disaster Policy Cabinet. Encourages that group to incorporate climate disaster and response into its priority to ensure the quick deployment of resources.

Hartig: We've had a lot of conversations with DMVA on this and we can get you comments on this. I think that the idea is fine. Right now, the Denali Commission is working on the housing project to move housing from JBER to Metarvik. The State is providing a match. It's just that there's no dedicated source of funds.

Nils: Final action item for PS#1 is 1.4D, which says to name lead climate staff for each agency. This could get rolled into one of the previous action items – depends on what happens to the CALT.

Theresa Imm: It dawned on me as you're going through 1.4 that it's probably the overarching goal of the CALT. It seems like it should be the first goal of the document, from an organizational standpoint.

Nils: We've talked about this before. Structured the way it is because the team's talked about the importance of starting at local level.

Katie Conway & Janet Reiser: Just wanted to put in a plug for AEA to be included as the list of departments that wold report to the Governor. For the same reason that AEA has been part of the CALT and CCT, we should probably be added.

Nils: Yes. Any red flags for people?

Hopkins: My question is how this gets edited next. There's a robust amount of information in here, and I wonder how it gets edited down.

Nils: Right now the goal would be to have a complete version for your review by the end of the week. 1.2A talks about increasing ecosystem-scale and cumulative impact research. Talking about scaling up DEC and DF&G research

Hinzman: It seems to me that DNR should be added.

Nils: Any other comments? 2.1B talks about investing in programs that build up our data acquisition at different levels. Talks about reviwing different data gathering activities. I liked the idea of hosting a statewide data management conference to do a more regular assessment of data needs. Larry, do you have any thoughts?

Hinzman: It doesn't exist. There's a great model that's being developed in Canada for that. They're making the data interoperable and sharable across platforms. I'll write something up and send a link to provide information

Linda Behnken: Canada is also figuring out a way to take in data that fishermen are recording on the ground and including that in their database. (Initially had a database.) Just figured out how to do that in a way that protects the Department of Fisheries and Ocean Systems.

Hinzman: We do have something like that now through the LEO Network from ANTHC. We could mention that too.

Nikoosh: If I recall, NSF has national data standards Is that correct?

Hinzman: NSF does not, but other agencies like USGS and NOAA have very strict standards. I don't think it's hopeful that we'd get these federal agencies to incorporate LEO observations.

Nils: Should we include AEA's data management portal?

Conway: Yes.

Nils: Okay. Larry's going to work on some verbiage for 2.1D so we're moving on to 2.2, which is about One Health Approaches. 2.2C talks about ocean acidification which originally wasn't referenced directly in the action plan. We talk about research methodologies, participating in the Alaska Ocean Acidification Network. 2.2 is one of the more challenging in terms of what the State can do, so it's a good place for innovation.

Behnken: One thing that comes to mind was the presentation on research being done on crab stacks in Kodiak and how a slower rate of change allowed animals to tolerate the change as long as it happened at a slower rate. That can help people to understand that are benefits to just slowing it down.

Nils: That comes back to the challenge. 2.3A includes three appropriate departments (DEC, DF&G, DNR). The challenge will be prioritization and allocation of funds – identifying the fact that there are huge gaps. How we move forward will require help from departments. Someone proposed including a climate impact assessment as we evaluate proposed future state and community development. Need more effort to figure out how that will look. It may be between a couple of different agencies.

Nils: Hearing no red flags, we'll move on.

Imm: Can we include ANCs as part of land and resource managers? A lot of this has overarching effects on how ANC's manage their lands and natural resources.

Nils: That makes sense. A lot of the conversation right now is focused on the government and public sector.

Imm: I understand that, but as large landowners, this policy can have long-term effects on how lands are managed in the State.

Nils: 2.3D looks at response options for threatened ecosystems. This could probably be built out a little bit. David Rogers, is there an annual publication from the States?

David Rogers: No, I don't think there's a comprehensive list.

Nils: Next policy statement talks about areas to grow economic development. 3.1A talks about increasing value-added economic activities.

Isaac Vanderburg: I think there are several different ways to do innovation centers based on clusters like fisheries or renewables or microgrids. I'll give you some language.

Rose: In terms of organizing things, I think that all of these things in 3 and 4 relate to the policy and should go higher. It's currently kind of buried. Everything's going to flow from State policy. That's my suggestion.

Nils: 3.1C modeling carbon-neutral models of local investments. Next we talked about public-private partnerships.

Vanderberg: I also think there;'s opportunity to consider a funding mechanism or ways that State can support demonstration projects or pilot projects. It might be worth mentioning that. Some of those projects are probably taking place, but it would be great if the State could contribute capital.

Rose: Green banks really fit here.

Nils: Responding to Meera's concern, I understand that we don't want of this to sound like it's one organization driving the effort. 3.1C talks about mariculture. A little bit about this ties back to the ocean economy. Open to anyone who has language for this.

Behnken: I'll send you some language.

Nils: 3.2 is diversification, developing business expertise. This was referenced a little earlier in the plan. We're looking at the work we're doing around adaptation as an export opportunity. How do we review what's going on and ultimately increase our knowledge export to Alaska's benefit.

Rose: It makes sense to me to look at community relocation through a holistic approach rather an a piecemeal approach.

Nils: 3.2B talks about process innovation. We don't have anything for it right now, but that's something we'll be looking for from you and from others.

Vanderberg: I can send something to you. I'd also add "business model" innovation.

Nils: Thanks. I believe that there's some work around this in the University. As we dig in to the Oil and Gas report. Here we've got a reference to the climate collaboratory and emphasizing STEM education in K-12. Goal is to develop student attainment around climate change.

Vanderberg: I'd suggest we add entrepreneurship.

Nils: 3.3A is about statewide efforts to train Alaskas. This goes back to the fact that there are training programs – how do we make them better. Meera, what is holding them back?

Kohler: Both capacity and need for resources. Build capacity with additional resources.

Nils: 3.4 looks at developing strategic plan for growth within ocean economy. I still need some narrative for this – if you have something, please send it to me. 3.4B is developing incentives for entrepreneurship.

Vanderberg: We have a lot about Green Bank here, which is great. I also think we need a VC fund to help other groups. Is this the right place to put it?

Nils: We have a lot of "how do we pay for it" in #6. You called it early stage VC investment or early stage start-up investment?

Vanderberg: Yes, totally different role from the Green Bank. There are now start-ups in Alaska that are looking for that early round of funding.

Nils: Maybe a lot of 3.5 could be incorporated elsewhere in the plan. Now we're at 4. I think PS#4 about maximizing carbon neutral growth is where we have specific references to reductions in emissions in a bunch of different sectors. We have conversations before about what baseline we're using. Previously mentioned 2005, which is consistent with Paris Agreeement. We have DEC report through 2015.

Randall: I think what you'll see in the comments is that even getting to a 50% reduction of 2005 is achievable.

Nils: Thanks, Randall. Commissioner, do you have any thoughts?

Hartig: DEC's preference would be to use 2005 as the base. I generally agree with Randall. You see a decrease from 2005 to 2015, which is the last year we have in the inventory. The declines in those two areas could have been related to declining oil production or the recession. When the economy picks up, what's going to happen to emissions? Our best guess is that they're going to go right back up. In my mind, there will be pressures for emissions to come back up, and they will come back up without considerable work. The 2005 baseline also makes it easier for us to dialogue with other parties. We can also include an aspirational goal. Just think we need to focus on controlling what's already been achieved.

Alice Edwards: I think that the Commissioner summed it up pretty well.

Hopkins: Since I haven't seen the O&G report, are there controls in there as production ramps up? Will we get to see that report? Are there control measures in there since that might be the way to reach these emissions goals?

Nils: You'll see that report. I'm going to review it first and see what we can incorporate into the action plan.

Imm: I just wanted to make the comment with regard to 4.1, the action plan has changed since we wrote the report. You'll see some gaps that we'll need to come together to discuss.

Nils: Hold off on responding to what's in here right now before we've had a chance to digest it and respond to what's in here. 4.2C continues to talk about energy efficiency.

Conway: I think that it's worth considering an EERS or an RPS. A lot of the research points to EERS to being, at least theoretically, one of the best ways to reach goals.

Nils: I think that we mention it elsewhere – maybe it's just not in this space. 4.3 talks about a renewable portfolio standard. This narrative isn't in the correct spot – it's basically just narrative about what would have to happen.

Rose: I think it would be cleaner to have a 4.3A and B establishing an RPS. You have narrative under the larger goal rather than the subgoal.

Nils: Should we do the same thing for an EERS?

Rose: Yes.

Nils: I think we have good narrative for the transportation section in 4.4. We need something for carbon-neutral propulsion systems for aviation and maritime use. 4.5 needs work. All of the education policy statement needs work. We'll have a draft that puts that information in there by the end of the week. Any thoughts on education piece?

Hopkins: Thanks for incorporating what we've submitted. It's much more specific than it was before.

Nils: For the education portion, we received a lot of new action items. Really developing a broader narrative for why and what.

Imm: On 5, in the O&G panel report that we provided, we did include some comments around natural resource education. You can pull that out of our document.

Nils: 6.1D would be funded by something like a statewide carbon tax or something like the EETF. Probably the most substantive issue out of all of this is how we'll pay for it. It might be worth scheduling a call on the bigger things (Green Bank, carbon pricing, EERS/RPS). I know that we haven't had enough time to go through that. There was an additional action item to endorse a national carbon fee and dividend. Another action item to look in to carbon sequestration.

Nils: We'll have a call during the week of the 16^{th} and a more complete final version by August 2^{nd} meetings.

Hopkins: Questions from public about when they can see final draft. Would that be between the 13th and the 17th?

Nils: Let's get a complete version and then we'll have a final draft.